IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Hermann Lueckhoff	Art Unit	: 2444
Serial No.	: 10/814,832	Examiner	: Peling Andy Shaw
Filed	: March 31, 2004	Conf. No.	: 6486

Title : RETRIEVING INFORMATION FOR PROCESSING A RECEIVED
ELECTRONIC MESSAGE

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

<u>BRIEF ON APPEAL</u>

(1)   **Real Party in Interest**

SAP Aktiengesellschaft, the assignee of this application, is the real party in interest.

(2)   **Related Appeals and Interferences**

No related appeals or interferences are pending.

(3)   **Status of Claims**

Claims 1-4, 6-18, and 20-22 are pending; claims 23-24 are withdrawn; and claims 5 and 19 are canceled. Pending claims 1-4, 6-18, and 20-22 stand rejected in the final Office Action of June 23, 2010. In particular, claims 1-3, 6-9, 11-17, and 20-22 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Publ. No. 2004/0064512 to Arora et al. ("the Arora reference"). Claims 4, 10, and 18 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over the Arora reference and further in view of U.S. Pat. No. 7,130,885 to Chandra ("the Chandra reference"). Claims 1, 11, and 15 are independent.

Applicant filed a Notice of Appeal on September 14, 2010. Applicant appeals the rejections of all pending claims 1-4, 6-18, and 20-22.

(4)   **Status of Amendments**

All amendments have been entered. A listing of the current claims is included in the Appendix of Claims provided with this Appeal Brief.

(5)   **Summary of Claimed Subject Matter**

Applicant's claimed subject matter relates to routing electronic messages (e.g., email messages) sent to a generic message account (e.g., help@example.com) based upon fact information from a source that is external to the message. For example, assume that a sender transmits an email to help@example.com (an example generic message account). The computer system receiving the email may be capable of performing a variety of tasks in response to receiving the email (e.g., route email to support staff, perform automated operation, etc.). Per Applicant's claimed subject matter, the computer system can determine an appropriate task by identifying and retrieving previous email transmissions received from the sender (example external fact information) for subsequent analysis. For instance, the subsequent analysis of the retrieved email transmissions can indicate that the received email should be routed to a particular support engineer who has had success resolving the sender's previous inquiries. *See, e.g.*, Spec. at 4:2-6:3; 13:24-15:29.

Independent claim 1 is directed to a "method for use in a computer system for responding to received electronic messages." For example, method 300 is described with regard to FIG. 3 as being performed by the server device 102 of the system 100. Spec. at 17:14-17. Claim 1 recites "receiving, at a computer system, an incoming electronic message addressed to a general message account not assigned to any specific user." For example, the server device 102 is described with respect to FIG. 1 as receiving an incoming electronic message (IEM) 110. Spec. at 5:5-9. The IEM 100 is described as corresponding to the general account 112 that can correspond to a generic email address. Spec. at 4:15-29.

Claim 1 further recites "identifying, by the computer system, stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message." The server device 102 is described with respect to FIG. 1 as identifying, in response to receiving the IEM 110, stored fact information 128 from an electronic file 132 that is external to the IEM 110. Spec. at 5:5-23.

Claim 1 additionally recites that "upon receipt of the incoming electronic message in the computer system, selecting a first meta information from a plurality of meta information portions

based on information retrieved from the incoming electronic message." For example, the step 420 is described with regard to FIG. 4 as accessing meta information upon receiving an IEM. Spec. at 18:21-24. Some of the contents of an IEM can be extracted and analyzed to identify information external to the IEM. Spec. at 4:7-14. Claim 1 further recites that "each meta information includes a rule and a fact attribute identified by the rule." For example, the meta information 124 is described with regard to FIGS. 1 and 2 as including rules 200 that can be used to identify fact attributes 202. Spec. at 6:12-22.

Claim 1 also recites that "the fact attribute specifies a pre-selected class of stored fact information that is associated with the incoming electronic message, wherein the stored fact information is external to the incoming electronic message." For example, the meta information 124 is described with regard to FIG. 1 as identifying a fact attribute that corresponds to a class of stored fact information 128, which is depicted in FIG. 1 as being external to the IEM 110. Spec. at 6:12-22. Claim 1 additionally recites that "the rule is associated with an action performed by the computer system with regard to the incoming electronic message when the rule is met by the pre-selected class of stored fact information specified by the fact attribute." For example, the rule 200 is described with regard to FIG. 2 as being associated with one of the actions 204 which can be performed if the rule 200 is satisfied. Spec. at 13:11-16.

Claim 1 further recites that "accessing at least the first meta information of the plurality of meta information portions stored in the computer system, the first meta information including a first rule and a first fact attribute." For example, "[u]pon receiving the IEM 110, the server device 102 will access meta information 124 in a first repository 126," Spec. at 5:5-9, and the meta information 124 is described with regard to FIGS. 1 and 2 as including rules 200 that can be used to identify fact attributes 202. Spec. at 6:12-22. Claim 1 additionally recites that "determining a first pre-selected class of a plurality of classes of stored fact information from the first fact attribute and a first service of a plurality of services from the first fact attribute, wherein the first service is specified by the first fact attribute and includes executable instructions for retrieving at least a first portion of the first pre-selected class of stored fact information." For example, the meta information 124 is described with regard to FIG. 1 as identifying a fact attribute that corresponds to a class of stored fact information 128, which is depicted in FIG. 1 as being external to the IEM 110. Spec. at 6:12-22. In another example, the meta information

124A is described with regard to FIG. 1 as identifying the first service 122A that includes executable instructions for retrieving a particular piece of fact information. Spec. at 4:30-5:16.

Claim 1 also recites "retrieving, by the computer system, at least part of the identified stored fact information in preparation for the subsequent analysis to determine how to route the incoming electronic message, by retrieving at least the first portion of the stored fact information that is a member of the first pre-selected class using the first service" and "storing, by the computer system, the retrieved stored fact information for subsequent analysis to determine how to route the incoming electronic message." For example, the server device 102 is described with regard to FIG. 1 as retrieving stored fact information 128 and storing such information in an electronic file 132 in association with the IEM 110. Spec. 5:5-23.

Claim 1 additionally recites that the first retrieved portion of the stored fact information is stored "in a markup language formatted electronic file that is associated with the incoming electronic message, wherein the markup language formatted electronic file is configured to permit the first rule to be subsequently applied to the first retrieved portion to determine how to route the incoming electronic message." For example, the electronic document 132 is described with regard to FIG. 1 and depicted in Table 1 as being provided in extensible markup language (XML) code. Spec at 7:3-9:12.

Independent claim 11 is directed to a "computer program product tangibly embodied in a computer readable storage medium and containing executable instructions that when executed cause a processor to perform operations." For example, the method 300 described with regard to FIG. 3 as being performed by the server device 102 based on execution instructions stored on a computer program product. Spec. 17:14-17. Claim 11 recites "receiving, at a computer system, an incoming electronic message addressed to a general message account not assigned to any specific user." For example, the server device 102 is described with respect to FIG. 1 as receiving an incoming electronic message (IEM) 110. Spec. at 5:5-9. The IEM 100 is described as corresponding to the general account 112 that can correspond to a generic email address. Spec. at 4:15-29.

Claim 11 further recites "identifying, by the computer system, stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic

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message." The server device 102 is described with respect to FIG. 1 as identifying, in response to receiving the IEM 110, stored fact information 128 from an electronic file 132 that is external to the IEM 110. Spec. at 5:5-23.

Claim 11 additionally recites that "upon receipt of the incoming electronic message in the computer system, selecting a first meta information from a plurality of meta information portions based on information retrieved from the incoming electronic message." For example, the step 420 is described with regard to FIG. 4 as accessing meta information upon receiving an IEM. Spec. at 18:21-24. Some of the contents of an IEM can be extracted and analyzed to identify information external to the IEM. Spec. at 4:7-14. Claim 11 further recites that "each meta information includes a rule and a fact attribute identified by the rule." For example, the meta information 124 is described with regard to FIGS. 1 and 2 as including rules 200 that can be used to identify fact attributes 202. Spec. at 6:12-22.

Claim 11 also recites that "the fact attribute specifies a pre-selected class of stored fact information that is associated with the incoming electronic message, wherein the stored fact information is external to the incoming electronic message." For example, the meta information 124 is described with regard to FIG. 1 as identifying a fact attribute that corresponds to a class of stored fact information 128, which is depicted in FIG. 1 as being external to the IEM 110. Spec. at 6:12-22. Claim 11 additionally recites that "the rule is associated with an action performed by the computer system with regard to the incoming electronic message when the rule is met by the pre-selected class of stored fact information specified by the fact attribute." For example, the rule 200 is described with regard to FIG. 2 as being associated with one of the actions 204 which can be performed if the rule 200 is satisfied. Spec. at 13:11-16.

Claim 11 further recites that "accessing at least the first meta information of the plurality of meta information portions stored in the computer system, the first meta information including a first rule and a first fact attribute." For example, "[u]pon receiving the IEM 110, the server device 102 will access meta information 124 in a first repository 126," Spec. at 5:5-9, and the meta information 124 is described with regard to FIGS. 1 and 2 as including rules 200 that can be used to identify fact attributes 202. Spec. at 6:12-22. Claim 11 additionally recites that "determining a first pre-selected class of a plurality of classes of stored fact information from the first fact attribute and a first service of a plurality of services from the first fact attribute, wherein

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the first service is specified by the first fact attribute and includes executable instructions for retrieving at least a first portion of the first pre-selected class of stored fact information." For example, the meta information 124 is described with regard to FIG. 1 as identifying a fact attribute that corresponds to a class of stored fact information 128, which is depicted in FIG. 1 as being external to the IEM 110. Spec. at 6:12-22. In another example, the meta information 124A is described with regard to FIG. 1 as identifying the first service 122A that includes executable instructions for retrieving a particular piece of fact information. Spec. at 4:30-5:16.

Claim 11 also recites "retrieving, by the computer system, at least part of the identified stored fact information in preparation for the subsequent analysis to determine how to route the incoming electronic message, by retrieving at least the first portion of the stored fact information that is a member of the first pre-selected class using the first service" and "storing, by the computer system, the retrieved stored fact information for subsequent analysis to determine how to route the incoming electronic message." For example, the server device 102 is described with regard to FIG. 1 as retrieving stored fact information 128 and storing such information in an electronic file 132 in association with the IEM 110. Spec. 5:5-23.

Claim 11 additionally recites that the first retrieved portion of the stored fact information is stored "in a markup language formatted electronic file that is associated with the incoming electronic message, wherein the markup language formatted electronic file is configured to permit the first rule to be subsequently applied to the first retrieved portion to determine how to route the incoming electronic message." For example, the electronic document 132 is described with regard to FIG. 1 and depicted in Table 1 as being provided in extensible markup language (XML) code. Spec at 7:3-9:12.

Independent claim 15 is directed to a "computer system." For example, the computer system 100 is described with regard to FIG. 1. Claim 15 recites "an electronic messaging system in which an incoming electronic message addressed to a general message account not assigned to any specific user is received." For example, the email program 108 is described as part of the server device 102 that is configured to receive and store messages, such as the IEM 110 that is associated with the general account 112. Spec. at 4:15-29.

Claim 15 also recites "a first repository with stored fact information that is external to the incoming electronic message, wherein the stored fact information is configured to be

subsequently analyzed to provide an indication of how to route the incoming electronic message." For example, the repository 130 is described with regard to FIG. 1 as including stored fact information 128. Spec. 5:5-9. Claim 15 further recites "a second repository with meta information that identifies a first pre-selected class of a plurality of classes of the stored fact information." For example, the repository 126 is described with regard to FIG. 1 as including meta information 124 that identifies a pre-selected class of stored fact information. Spec. 5:5-9; 6:12-22.

Claim 15 further recites "a program product tangibly embodied in a computer readable storage medium and including executable instructions." For example, the method 300 described with regard to FIG. 3 as being performed by the server device 102 based on execution instructions stored on a computer program product. Spec. 17:14-17. Claim 15 also recites that "upon receipt of the incoming electronic message" the computer system is caused "to identify a portion of the stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message." The server device 102 is described with respect to FIG. 1 as identifying, in response to receiving the IEM 110, stored fact information 128 from an electronic file 132 that is external to the IEM 110. Spec. at 5:5-23.

Claim 15 additionally recites that the computer system is caused "to select a first meta information from a plurality of meta information portions based on information retrieved from the incoming electronic message." For example, the step 420 is described with regard to FIG. 4 as accessing meta information upon receiving an IEM. Spec. at 18:21-24. Some of the contents of an IEM can be extracted and analyzed to identify information external to the IEM. Spec. at 4:7-14. Claim 15 also recites that "each meta information includes a rule and a fact attribute identified by the rule." For example, the meta information 124 is described with regard to FIGS. 1 and 2 as including rules 200 that can be used to identify fact attributes 202. Spec. at 6:12-22.

Claim 15 also recites that "the fact attribute specifies a pre-selected class of stored fact information that is associated with the incoming electronic message, wherein stored fact information is external to the incoming electronic message." For example, the meta information 124 is described with regard to FIG. 1 as identifying a fact attribute that corresponds to a class of stored fact information 128, which is depicted in FIG. 1 as being external to the IEM 110. Spec.

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at 6:12-22. Claim 15 further recites that the "the rule is associated with an action performed by the computer system with regard to the incoming electronic message when the rule is met by the pre-selected class of stored fact information specified by the fact attribute." For example, the rule 200 is described with regard to FIG. 2 as being associated with one of the actions 204 which can be performed if the rule 200 is satisfied. Spec. at 13:11-16.

Claim 15 additionally recites that the computer system is caused "to access the first meta information in the second repository, the first meta information including a first rule and a first fact attribute." For example, "[u]pon receiving the IEM 110, the server device 102 will access meta information 124 in a first repository 126," Spec. at 5:5-9, and the meta information 124 is described with regard to FIGS. 1 and 2 as including rules 200 that can be used to identify fact attributes 202. Spec. at 6:12-22. Claim 15 also recites that the computer system is caused "to determine the first pre-selected class of a plurality of classes of stored fact information from the first fact attribute and a first service of a plurality of services from the first fact attribute, wherein the first service is specified by the first fact attribute and includes executable instructions for retrieving at least a first portion of the first pre-selected class of stored fact information." For example, the meta information 124 is described with regard to FIG. 1 as identifying a fact attribute that corresponds to a class of stored fact information 128, which is depicted in FIG. 1 as being external to the IEM 110. Spec. at 6:12-22. In another example, the meta information 124A is described with regard to FIG. 1 as identifying the first service 122A that includes executable instructions for retrieving a particular piece of fact information. Spec. at 4:30-5:16.

Claim 15 further recites that the computer system is caused "to retrieve at least part of the identified stored fact information in preparation for the subsequent analysis to determine how to route the incoming electronic message, by retrieving at least the first portion of the stored fact information from the first repository using the first service, the retrieved portion being a member of the first pre-selected class" and "to store the retrieved stored fact information for subsequent analysis to determine how to route the incoming electronic message." For example, the server device 102 is described with regard to FIG. 1 as retrieving stored fact information 128 and storing such information in an electronic file 132 in association with the IEM 110. Spec. 5:5-23.

Claim 15 also recites that first retrieved portion of the stored fact information is stored "in a markup language formatted electronic file that is associated with the incoming electronic

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message, wherein the markup language formatted file is configured to permit the first rule to be subsequently applied to the first retrieved portion to determine how to route the incoming electronic message." For example, the electronic document 132 is described with regard to FIG. 1 and depicted in Table 1 as being provided in extensible markup language (XML) code. Spec at 7:3-9:12.

(6) Grounds of Rejection to be Reviewed on Appeal

Applicant appeals the rejection of claims 1-3, 6-9, 11-17, and 20-22 under 35 U.S.C. § 102(e) as being allegedly anticipated by the Arora reference.

(7) Argument

For the following reasons, Applicant respectfully asserts that the present claims are patentable over the references of record, and request that the above rejections be reversed.

I. The Examiner does not set forth a *prima facie* case of anticipation.

The Examiner has not set forth a *prima facie* case of anticipation under 35 U.S.C. § 102(e). To establish a *prima facie* case of anticipation, "every element and limitation of the claimed invention must be found in a single prior art reference, <u>arranged as in the claim</u>." *Brown v. 3M*, 60 USPQ.2d 1375, 1376 (Fed. Cir. 2001) (emphasis added). "[I]n order to demonstrate anticipation [under 35 U.S.C. § 102], the proponent must show that the four corners of a single, prior art document describe every element of the claimed invention." *Net Money, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (internal quotation marks omitted). "[T]he prior art reference – in order to anticipate under 35 U.S.C. § 102 – must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements arranged as in the claim." *Id.* (internal quotation marks omitted). Arranged as in the claim "refers to <u>the need for an anticipatory reference to show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order</u>." *Id.* at 1370 (emphasis added).

As explained in greater detail below, the Examiner has not set forth a *prima facie* case of anticipation because (i) the Arora reference does not disclose or suggest all of the features recited

in the independent claims 1, 11, and 15; and (ii) the Arora reference does not disclose all of the features of the independent claims arranged as in the claims, as required in *Brown* and *Net Money*.

A.   The Arora reference does not disclose or suggest all of the features recited in independent claims 1, 11, and 15.

Contrary to the Examiner's assertions on pages 3-6 of the Office Action, the Arora reference does not disclose or suggest all of the features recited in Applicant's independent claims. For example, the Arora reference does not disclose or suggest "identifying, by the computer system, stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message," as recited in Applicant's independent claims.

The Examiner errs when concluding that paragraphs 0348, 0518, and 0696 of the Arora reference disclose or suggest such a feature. Office Action at p. 3. These paragraphs of the Arora reference discuss the format and format of advertisements, *see* Arora at 0348, caching advertisements, *see id.* at 0518, and adding metadata to messages when messages are delivered between peer computing devices. *See id.* at 0696. That is, these paragraphs do not discuss or suggest an "incoming electronic message" or "stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message," as recited in Applicant's independent claims.

For example, paragraph 0348 of Arora provides that "[a]dvertisements represented in a markup language such as XML, like any markup language document, may be composed of a series of hierarchically arranged elements," that "[a]n element may also have attributes," and that "[a]n attribute may be used to store metadata, which may be used to describe the data within the element." Nowhere does paragraph 0348 discuss an "incoming electronic message" or "stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the

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incoming electronic message," as recited in Applicant's independent claims. Instead, paragraph 0348 merely provides that an advertisement can have elements and element attributes.

Continuing with paragraph 0518 of Arora, it provides that "the rendezvous peers may be able to cache advertisements," that "[a]n advertisement may be defined as metadata or descriptions of a resource," and that "[a]dvertisements may be published to allow other entities to discover them." Nowhere does paragraph 0518 disclose or suggest an "incoming electronic message" or "stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message," as recited in Applicant's independent claims. Instead, paragraph 0518 merely discusses caching and publishing advertisements.

Finally, paragraph 0696 of Arora provides that "peer-to-peer platform messages are structured to allow peer-to-peer platform services and applications to add arbitrary metadata information to the messages such as credentials, digests, certificates, public keys, etc." (emphasis added). Paragraph 0696 further provides that "[a] credential is a token that when presented in a message body is used to identify a sender and can be used to verify that sender's right to send the message to the specified endpoint." That is, instead of identifying "stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message," as recited in the independent claims, paragraph 0696 of Arora is directed to adding information to messages that can be used to verify a sender (e.g., adding credentials).

Nowhere, in these cited paragraphs or in the other portions of Arora, does the Arora reference disclose or suggest "identifying, by the computer system, stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message," as recited in Applicant's independent claims. Instead, the Arora reference is directed to "a distributed instant messaging system that uses a distributed index . . . to implement an instant messaging system in a group of participating peers." Arora at Abstract.

Based on at least the deficiencies in the Examiner's reliance on the Arora reference noted above, the Examiner has failed to set forth a *prima facie* case of anticipation with regard to the

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independent claims, and their dependent claims. As such, Applicant submits that the pending claims are patentable over the Arora reference and the rejection should be reversed.

> **B.**   **The Arora reference does not disclose all of the features of the independent claims arranged as in the independent claims 1, 11, and 15.**

Even if all of the features of the independent claims could be found in Arora by way of creating a highly selective assembly of unrelated statements from Arora without regard to their true context, a premise that Applicant contests above, Arora nevertheless does not provide such features arranged as in the independent claims. This deficiency is contrary to the requirements for anticipation set forth in *Brown* and *Net Money*.

The Examiner relies on disparate and distinct features from the Arora reference that are combined out of context in the Office Action to allege anticipation by Arora. For example, the Examiner rejects the pending independent claims under 35 U.S.C. § 102 by combining portions of the Arora reference regarding rendezvous peers, advertisements, services, groups and group membership, keyword and subject of interest registration, security, message filtering and distribution, membership screening, and advertisement caching. Office Action at pp. 3-6. The Arora reference does not disclose or suggest all of the features of the independent claims arranged as in the claims.

As such, Applicant submits that a *prima facie* case of anticipation has not been set forth with regard to the Arora reference and that Applicant's independent claims, and their dependent claims, are patentable over the Arora reference for at least the foregoing reasons.

Please charge Deposit Account No. 06-1050 $540 for the brief fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Appendix of Claims

1. A method for use in a computer system for responding to received electronic messages, the method comprising:

(a) receiving, at a computer system, an incoming electronic message addressed to a general message account not assigned to any specific user;

(b) identifying, by the computer system, stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message, wherein identifying comprises:

(i) upon receipt of the incoming electronic message in the computer system, selecting a first meta information from a plurality of meta information portions based on information retrieved from the incoming electronic message, wherein each meta information includes a rule and a fact attribute identified by the rule, wherein:

(A) the fact attribute specifies a pre-selected class of stored fact information that is associated with the incoming electronic message, wherein the stored fact information is external to the incoming electronic message, and

(B) the rule is associated with an action performed by the computer system with regard to the incoming electronic message when the rule is met by the pre-selected class of stored fact information specified by the fact attribute;

(ii) accessing at least the first meta information of the plurality of meta information portions stored in the computer system, the first meta information including a first rule and a first fact attribute;

(iii) determining a first pre-selected class of a plurality of classes of stored fact information from the first fact attribute and a first service of a plurality of services from the first fact attribute, wherein the first service is specified by the first fact attribute and includes executable instructions for retrieving at least a first portion of the first pre-selected class of stored fact information;

(c) retrieving, by the computer system, at least part of the identified stored fact information in preparation for the subsequent analysis to determine how to route the incoming electronic message, by retrieving at least the first portion of the stored fact information that is a member of the first pre-selected class using the first service; and

(d) storing, by the computer system, the retrieved stored fact information for subsequent analysis to determine how to route the incoming electronic message by storing the first retrieved portion of the stored fact information in a markup language formatted electronic file that is associated with the incoming electronic message, wherein the markup language formatted electronic file is configured to permit the first rule to be subsequently applied to the first retrieved portion to determine how to route the incoming electronic message.

2. The method of claim 1, wherein the first portion of the stored fact information is retrieved when there is a need to apply the rule.

3. The method of claim 1, wherein the computer system includes a workflow for processing the incoming electronic message and wherein the method further comprises providing the electronic file with a lifetime bound to the workflow.

4. The method of claim 1, wherein the electronic file is an XML document and the retrieved

portion is stored in the XML document using an XSL transaction.

5. (Canceled).

6. The method of claim 1, further comprising performing an initial screening of the incoming

electronic message before accessing the meta information, wherein a result of the initial

screening is used to select the first rule from a plurality of rules.

7. The method of claim 1, wherein the meta information further includes an identifier specifying

where the retrieved first portion of stored fact information is to be stored in the electronic file,

and wherein the identifier is used in storing the retrieved first portion.

8. The method of claim 7, further comprising using the identifier to access the retrieved first

portion of stored fact information in the electronic file to apply the first rule to the retrieved first

portion.

9. The method of claim 7, wherein the identifier is an XPath query.

10. The method of claim 1, wherein the retrieved first portion of the stored fact information

pertains to at least one category selected from the group consisting of: a business context of the

incoming electronic message, analytical data relating to the incoming electronic message,

availability of a person for attending to the incoming electronic message, a skill of a person for

attending to the incoming electronic message, communication information relating to the incoming electronic message, an industry with which the incoming electronic message is associated, and combinations thereof.

11. A computer program product tangibly embodied in a computer readable storage medium and containing executable instructions that when executed cause a processor to perform operations comprising:

(a) receiving, at a computer system, an incoming electronic message addressed to a general message account not assigned to any specific user;

(b) identifying, by the computer system, stored fact information that is related to and external to the incoming electronic message such that subsequent analysis of the stored fact information provides an indication of how to route the incoming electronic message, wherein identifying comprises:

(i) upon receipt of the incoming electronic message in the computer system, selecting a first meta information from a plurality of meta information portions based on information retrieved from the incoming electronic message, wherein each meta information includes a rule and a fact attribute identified by the rule, wherein:

(A) the fact attribute specifies a pre-selected class of stored fact information that is associated with the incoming electronic message, wherein the stored fact information is external to the incoming electronic message, and

(B) the rule is associated with an action performed by the computer system with regard to the incoming electronic message when the rule is met by the pre-selected class of stored fact information specified by the fact attribute;

(ii) accessing the first meta information stored in the computer system, the first meta information including a first rule and a first fact attribute;

(iii) determining a first pre-selected class of a plurality of classes of stored fact information from the first fact attribute and a first service of a plurality of services from the first fact attribute, wherein the first service is specified by the first fact attribute and includes executable instructions for retrieving at least a first portion of the first pre-selected class of stored fact information;

(b) retrieving, by the computer system, at least part of the identified stored fact information in preparation for the subsequent analysis to determine how to route the incoming electronic message, by retrieving at least the first portion of the stored fact information that is a member of the first pre-selected class using the first service; and

(c) storing, by the computer system, the retrieved stored fact information for subsequent analysis to determine how to route the incoming electronic message by storing the first retrieved portion of the stored fact information in a markup language formatted electronic file that is associated with the incoming electronic message, wherein the markup language formatted electronic file is configured to permit the first rule to be subsequently applied to the first retrieved portion to determine how to route the incoming electronic message.

12. The computer program product of claim 11, wherein the first portion of the stored fact information is retrieved when there is a need to apply the rule.

13. The computer program product of claim 11, wherein the computer system includes a

workflow for processing the incoming electronic message, and wherein the operations further

comprise:

providing the electronic file with a lifetime bound to the workflow.

14. The computer program product of claim 11, the operations further comprising:

      performing an initial screening of the incoming electronic message before accessing first

the meta information; and

      using a result of the initial screening to select the first rule from a plurality of rules.

15. A computer system comprising:

      an electronic messaging system in which an incoming electronic message addressed to a

general message account not assigned to any specific user is received;

      a first repository with stored fact information that is external to the incoming electronic

message, wherein the stored fact information is configured to be subsequently analyzed to

provide an indication of how to route the incoming electronic message;

      a second repository with meta information that identifies a first pre-selected class of a

plurality of classes of the stored fact information; and

      a program product tangibly embodied in a computer readable storage medium and

including executable instructions that when executed cause the computer system, upon receipt of

the incoming electronic message, (a) to identify a portion of the stored fact information that is

related to and external to the incoming electronic message such that subsequent analysis of the

stored fact information provides an indication of how to route the incoming electronic message,

wherein identifying comprises the computer system being caused: (i) to select a first meta

information from a plurality of meta information portions based on information retrieved from

the incoming electronic message, wherein each meta information includes a rule and a fact

attribute identified by the rule, wherein: (A) the fact attribute specifies a pre-selected class of

stored fact information that is associated with the incoming electronic message, wherein stored

fact information is external to the incoming electronic message, and (B) the rule is associated

with an action performed by the computer system with regard to the incoming electronic

message when the rule is met by the pre-selected class of stored fact information specified by the

fact attribute, (ii) to access the first meta information in the second repository, the first meta

information including a first rule and a first fact attribute, (iii) to determine the first pre-selected

class of a plurality of classes of stored fact information from the first fact attribute and a first

service of a plurality of services from the first fact attribute, wherein the first service is specified

by the first fact attribute and includes executable instructions for retrieving at least a first portion

of the first pre-selected class of stored fact information, (b) to retrieve at least part of the

identified stored fact information in preparation for the subsequent analysis to determine how to

route the incoming electronic message, by retrieving at least the first portion of the stored fact

information from the first repository using the first service, the retrieved portion being a member

of the first pre-selected class, and (c) to store the retrieved stored fact information for subsequent

analysis to determine how to route the incoming electronic message by storing the first retrieved

portion in a markup language formatted electronic file that is associated with the incoming

electronic message, wherein the markup language formatted file is configured to permit the first

rule to be subsequently applied to the first retrieved portion to determine how to route the

incoming electronic message.

16. The computer system of claim 15, wherein the executable instructions further cause the computer system to retrieve the first portion of the stored fact information when there is a need to apply the rule.

17. The computer system of claim 15, further comprising a workflow for processing the incoming electronic message, wherein the electronic file has a lifetime bound to the workflow.

18. The computer system of claim 15, wherein the electronic file is an XML document and the retrieved portion is stored in the XML document using an XSL transaction.

19. (Canceled)

20. The computer system of claim 15, wherein the meta information further includes an identifier specifying where the retrieved first portion of stored fact information is to be stored in the electronic file, and wherein the executable instructions cause the computer system to use the identifier in storing the retrieved first portion.

21. The computer system of claim 20, wherein the executable instructions cause the computer system to use the identifier in accessing the retrieved first portion of stored fact information to apply the first rule to the retrieved portion.

22. The computer system of claim 20, wherein the identifier is an XPath query.

23. (Withdrawn) A method of configuring a computer system for responding to received electronic messages, the method comprising:

receiving an input in a computer system, the input identifying a first user-selected class of a plurality of classes of stored fact information to be retrieved upon receipt in the computer system of at least one incoming electronic message; and

storing, in a repository that is accessed upon receipt of the incoming electronic message, meta information that identifies the first user-selected class such that a portion of the stored fact information that is a member of the first user-selected class can be retrieved upon accessing the meta information.

24. (Withdrawn) A computer program product containing executable instructions that when executed cause a processor to perform operations comprising:

receive an input in a computer system, the input identifying a first user-selected class of a plurality of classes of stored fact information to be retrieved upon receipt in the computer system of at least one incoming electronic message; and

store, in a repository that is accessed upon receipt of the incoming electronic message, meta information that identifies the first user-selected class such that a portion of the stored fact information that is a member of the first user-selected class can be retrieved upon accessing the meta information.

Evidence Appendix

None.

Related Proceedings Appendix

None.